

REMARKS

The Office Action mailed February 5, 2008 has been reviewed and carefully considered. No new matter has been added.

By this Office Action, Claims 1-19 are pending.

Claims 1-6, 8-13, and 15-19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Publication No. 2002/0144286 to Ovadia (hereinafter "Ovadia") in view of U.S. Patent No. 6,212,563 to Beser (hereinafter "Beser"). Claims 7 and 14 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Ovadia in view of Beser and U.S. Patent Publication No. 2002/0083465A1 to Van Beek (hereinafter "Van Beek").

It is to be noted that Claims 1, 8, and 17 are the pending independent claims in the case.

It is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of Claim 1:

sequentially scanning at least two selected subsets of said plurality of channels for a channel having a data signal transmitted at a predetermined modulation protocol; and
if the data channel scanned for in the preceding step is NOT FOUND, further sequentially scanning at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal transmitted at other than said predetermined modulation protocol

It is respectfully asserted that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of Claim 8:

receiving and channel-search means operative to sequentially scan at least two selected subsets of said plurality of transmission channels for a channel having a data signal transmitted at a predetermined modulation protocol; and

the receiving and channel-search means being further operative, **upon NOT FINDING the data channel during the sequential scan**, to scan at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal transmitted at other than said predetermined modulation protocol.

It is respectfully asserted that that none of the cited references, either taken singly or in combination, teach or suggest the following limitations of Claim 17:

sequentially scanning at least two selected subsets of said plurality of channels for a channel having a data signal modulated thereon in accordance with symbols from one of said symbol constellations established in accordance with said known standard (the “data channel”);

upon Not Finding the data channel in the sequential scanning step,
scanning at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal modulated thereon in accordance with symbols from a symbol constellation other than one of said symbol constellations established in accordance with said known standard (the “non-standard data channel”)

Thus, in each of Claims 1 and 8, the *further* sequential scanning is performed if the **data channel** having a data signal transmitted at a predetermined modulation protocol **is NOT FOUND**, and also that the *further* sequential scanning is performed for a channel having a data signal transmitted at other than said predetermined modulation protocol.

Moreover, in Claim 17, the *further* sequential scanning is performed if the **data channel** having a data signal modulated thereon in accordance with symbols from one of said symbol constellations established in accordance with said known standard **is NOT FOUND**, and also that the *further* sequential scanning is performed for a channel having a data signal modulated thereon in accordance with symbols from a symbol constellation other than one of said symbol constellations established in accordance with said known standard.

The Examiner has essentially cited paragraph [0047] of Ovadia as corresponding to the reproduced limitations of Claims 1, 8, and 17, with the further citation of paragraph [0045] of Ovadia for the “at least two selected subsets” limitation recited in these claims, and with the further citation of elements 510 to 506 of Figure 5 of Ovadia for the “at least one, but less than all” limitation recited in these claims. The Examiner then says Ovadia fails to specifically teach having a data signal transmitted at other than said predetermined

modulation protocol, and relies upon Beser as teaching having a data signal transmitted at other than said predetermined modulation protocol.

Initially, it is respectfully asserted that the Examiner has failed to set forth a prima facie case of obviousness for Claim 17, as required under 35 U.S.C. 103. As set forth in MPEP 2143.03 "All words in a claim must be considered in judging the patentability of that claim against the prior art" *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

In rejecting Claim 17, the Examiner has simply stated "For claim 17, it is a encoding with a known standard (QAM, [0047], line 7) claim of claim 1, therefore it is rejected for the same reason above" (Office Action, p. 5). However, Claim 17 has at least additional and different limitations as compared to the limitations recited in Claim 1. Thus, the Examiner has not even treated (i.e., has provided a citation to a relevant part of one or more of any of the references for) these additional and different limitations of Claim 17. Hence, the rejection of Claim 17 is deficient on its face.

Moreover, it is respectfully asserted that the Examiner has failed to set forth a prima facie case of obviousness (for another reason) for each of Claims 1,8, and 17, as required under 35 U.S.C. 103. In particular, the Examiner has not set forth articulated reasoning with some rational underpinning to support the legal conclusion of obviousness as required for a rejection under 35 U.S.C. 103.

For example, as set forth in MPEP 2142:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006). See also *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). <

In the case of Claim 1, the Examiner's reasoning is exactly reproduced as follows:
"Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine xxx et al. with xxx et al. to obtain the invention as specified, for different modulation protocols" (Office Action, p. 3). **The Applicants respectfully argue that the preceding Examiner's reasoning is merely a conclusory statement (that include only four words beyond the boilerplate language), without any articulated reasoning with some rational underpinning to support the legal conclusion of obviousness as required for a prima facie rejection under 35 U.S.C. 103.** In fact, so quick was the Examiner to deal with or rather to dispense with the requirement of such articulated reasoning that the Examiner did not even take the time to fill in names of the specific references, but rather left the boilerplate language ("xxx et al.", Office Action, p. 3).

Hence, the rejections of Claims 1, 8, and 17 is deficient on its face.

Further, it is respectfully asserted that the cited combination is further deficient in that the cited combinations fails to show all the limitations recited in Claims 1, 8, and 17, as required for a prima facie rejection under 35 U.S.C. 103.

For example, at the onset, it is respectfully pointed out that neither Ovadia nor Beser mention "a predetermined modulation protocol" or "other than said predetermined modulation protocol", as recited in each of Claims 1, 8, and 17. This is because Ovadia is directed to one particular modulation protocol, for example, that corresponding to the DOCSIS protocol (see, e.g., Ovadia, paragraphs [0025] and [0034]), and thus makes no mention (as there is no reason to do so) whatsoever regarding any of the preceding levels belong to "a predetermined modulation protocol" or "other than said predetermined modulation protocol", as recited in each of Claims 1, 8, and 17. Further, Beser simply mentions that "QAM can have any number of discrete digital levels typically including 4, 16, 64 or 256 levels" (Beser, col. 6, lines 65-66), and makes no mention whatsoever regarding any of the preceding levels belong to "a predetermined modulation protocol" or "other than said predetermined modulation protocol", as recited in each of Claims 1, 8, and 17.

Hence, it is unreasonable to cite Ovadia and Beser in combination as disclosing all the above recited limitations of Claims 1, 8, and 17, where Ovadia is simply showing sequential scanning (for one modulation protocol) WITHOUT MORE, while all (as relied upon by the Examiner) Beser mentions is that QAM may include 4, 16, 64 or 256 levels WITHOUT

MORE. For example, the further sequential scanning of at least one, but less than all, of the selected subsets of the plurality of channels for a channel having a data signal transmitted at other than said predetermined modulation protocol, **is only performed** if the data channel scanned for at the predetermined modulation protocol is not found. This condition, premised on, *inter alia*, essentially having unsuccessfully searched with respect to a predetermined modulation protocol, is not disclosed nor even remotely suggested by the references, either taken singly or in combination.

Hence, it is respectfully asserted that the cited combination fails to show all the limitations recited in each of Claims 1, 8, and 17. “To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art” (MPEP §2143.03, citing *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). Accordingly, Claims 1, 8, and 17 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above.

“If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious” (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)). Claims 2-7 depend from Claim 1 and, thus, includes all the elements of Claim 1. Claims 9-16 depend from Claim 8 or a claim which itself is dependent from Claim 8 and, thus, include all the elements of Claim 8. Claims 18-19 depend from Claim 17 or a claim which itself is dependent from Claim 17 and, thus, include all the elements of Claim 17. Accordingly, Claims 2-7, 9-16, and 18-19 are patentably distinct and non-obvious over the cited references for at least the reasons set forth above with respect to independent Claims 1, 8, and 17, respectively.

Thus, reconsideration of the rejections is respectfully requested.

In view of the foregoing, Applicants respectfully request that the rejection of the claims set forth in the Office Action of February 5, 2008 be withdrawn, that pending claims 1-19 be allowed, and that the case proceed to early issuance of Letters Patent in due course.

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PATENT
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No fee is believed due with regard to the filing of this amendment. However, if a fee is due, please charge Deposit Account No. 07-0832.

Respectfully submitted,
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